UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,594	11/24/2003	Frederic M. Newman	08876.	5037

			EXAMINER
7590	07/18/2006		NGUYEN, THU V

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ART UNIT	PAPER NUMBER
3661	

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 April 2006*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *4-6,8 and 10-27* is/are pending in the application.

    4a) Of the above claim(s) *17-27* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *4-6, 8, 10-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

The amendment filed on April 13, 2006 has been entered. By this amendment, claims 1-3,

7, 9 have been canceled, claims 17-27 have been withdrawn from consideration, and claims 4 –

6, 8, 10-27 are now pending in the application.

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 4-6, 8, 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Richardson (US 4,545,017) in view of Ruddy (US 6,527,130).

As per claim 4, Richardson discloses a process for controlling the speed of a traveling

block, the process comprises: determining the speed of the block (col.6, lines 14-19); adjusting

the speed of the block to maintain its speed at or below the maximum velocity value (col.5, lines

25-31; col.9, lines 16-22). Moreover, Richardson teaches an upper slow down zone (2 feet to 18

feet) with maximum velocity value (0.3 ft/sec-6.7 ft/sec) being lower than the zone below the

upper slow down zone (19 ft). Further, since the length of the upper slow down zone (at 20 ft)

is proportional with the velocity of the block, Richardson obviously teaches that the length of

the upper slow down zone is proportional to the momentum of the traveling block. Richardson

does not explicitly disclose comparing the speed of the block to a maximum velocity, and

determining the maximum velocity value as a function of the measured weight of the block,

however, since Richardson teaches the capability of monitoring the speed of the block and

adjusting the speed of the block when the speed of the block exceeds a predetermined value

(col.8, lines 33-43; col.9, lines 1-2), and since comparing the speed with a predetermined value

for determining exceeding of the value would have been well known Richardson obviously

encompasses comparing the speed of the block with the predetermined value. Richardson does

not explicitly disclose determining maximum velocity as a function of measured weight of the

traveling block. However, Richardson mentions the effect of weight on the speed (col.9, lines

27-35; col.8, lines 59-61) and Ruddy suggests determining maximum velocity value as a function

of dynamic weight load (col.1, lines 49-51; col.3, lines 15-19). Ruddy further teaches that

measuring the weight of a traveling block using weight sensing device (the load cells) would

have been known (col.1, lines 60-63). It would have been obvious to a person of ordinary skill

in the art at the time the invention was made to include consideration of dynamic measurement

of the block weight using well known weight sensor cells in determining the maximum speed of

the block in the process of Richardson in order to provide optimal selection of control speed to

the block according to the weight of the block to ensure safety and efficiency in controlling the

speed of the traveling block.

As per claim 5-6, slowing down the speed of the engine for slowing down the speed of

lifting or lowering the block, providing visual or sound warning devices for warning certain

condition of a vehicle would have been well known.

As per claim 8, Richardson teaches continually decreasing the maximum velocity in the slow down zone (col.8, lines 32-40).

As per claim 10-12, Richardson also teaches a lower slow down zone (distance 6ft-13 ft from the floor) with maximum velocity (6ft/sec) being continuously lower than the maximum velocity at the point (29 ft-20 ft at speed 7.1ft/sec-7.5 ft/sec) immediately above the slow down range (col.9, lines 3-22; col.8, lines 15-20). Further, Richardson teaches that the length of the slow down zone is proportional to the momentum of the traveling block (refer to the response to argument section below).

As per claim 13-14, Richardson teaches stopping the block when the uppermost position is reached (col.7, lines 32-34). Furthermore, sensing the position of the block using metal detector would have been well known.

As per claim 15-16, Richardson teaches slowing the block speed using brake (col.7, lines 23-35; col.9, lines 35-44). Further attaching pneumatic brake to a proportional valve for controlling applied brake pressure; logging data concerning operation or movement of the block for recording and monitoring purpose would have been well known.

Response to Arguments

3.   Applicant's arguments filed April 13, 2006 have been fully considered but they are not persuasive.

In response to applicant's argument on page 6, last two paragraphs through page 7, first two paragraphs, the applicant agrees that the momentum is well known calculated by the mass multiplied by velocity. However, the applicants asserts that the length of the upper slow down zones taught by Richardson seem to be inversely proportional to momentum using example 1 and 2 cited in page 7, lines 1-5 of the argument. However, relating the two examples to conclude that the length of the upper slow down zones is inversely proportional to the momentum does not seem accurate because in the two example, the mass of the block are completely different (the mass of the block in example 1 in co.7, line 68 is "empty", and the mass in the example II is "loaded"), therefore the momentum is the two examples cannot be determinedbecause the momentum is now dependent on two unknown variables: the mass and the velocity; therefore we cannot conclude that the length of the upper slow down zone is "proportional" or "inversely proportional" using the combined examples I and II. The examiner thinks it is more reasonable to analyze within only one example to determine if the upper slow down zone is proportional or inversely proportional to the momentum. Analyze example I: with the same mass of the block ("empty" mass denoted by the examiner as m_{empty}), the momentum of the empty block is $M1 = m_{empty} * v1 = m_{empty} *7.5$ ft/sec. In the same example I, in col.8, line 6, the momentum of the empty block is $M2 = m_{empty} *v2 = m_{empty} * 7.1$ ft/sec. From the two momentum M1 and M2, it is clear that M1 is larger than M2 (because for the same mass m_{empty}, the velocity v1=7.5ft/sec is larger than v2=7.1ft/sec). The corresponding length of the upper slow down zone corresponding to momentum M1 is 20 ft (col.7, line 68) that is larger than the corresponding length of the upper slow down zone corresponding to momentum M2 which is 19 ft (col.8, line 6), therefore the upper slow down zone taught by Richardson is

actually "proportional" to the momentum of the traveling block. Similar analysis for example

IV with loaded block shows that the slow down zone is proportional to the momentum

(because for the same mass of the block, the slow down zone is 16 ft for velocity of 6ft/sec and

13 ft for velocity of 2.6ft/sec in col.8, lines 17-18).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time
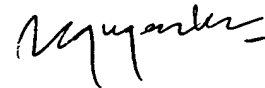
policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until

after the end of the THREE-MONTH shortened statutory period, then the shortened statutory

period will expire on the date the advisory action is mailed, and any extension fee pursuant to

37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Thu Nguyen whose telephone number is (571) 272-6967. The

examiner can normally be reached on T-F (7:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you

would like assistance from a USPTO Customer Service Representative or access to the

automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

July 8, 2006

THU V. NGUYEN
PRIMARY EXAMINER